

Section 4. Natural Gas

Total dry natural gas production in the United States during June 2006 was estimated as 1.5 trillion cubic feet, 2 percent lower than production during June 2005.

Consumption of natural and supplemental gas in June 2006 was 1.6 trillion cubic feet, 3 percent higher than the level in June 2005.

Deliveries to residential consumers in June 2006 were 146 billion cubic feet, 4 percent lower than the previous June's deliveries. Total deliveries to industrial consumers during June 2006 were 590 billion cubic feet, 2 percent lower than the previous June's level. The electric power sector's use of

natural gas in June 2006 was 647 billion cubic feet, 10 percent higher than the rate in June 2005.

Net imports of natural gas in June 2006 were estimated as 274 billion cubic feet, 3 percent higher than net imports in the previous June.

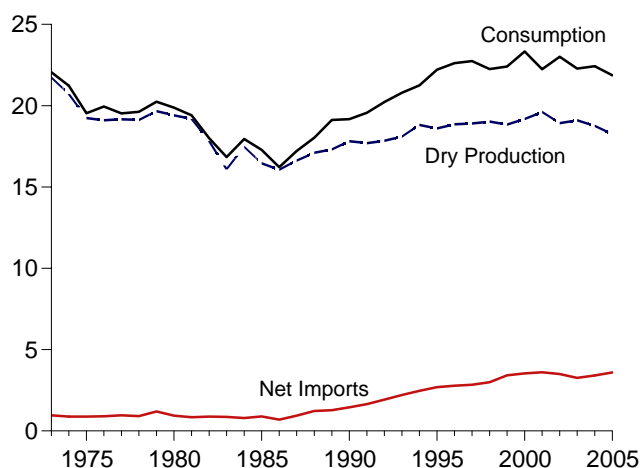
Stocks of working gas¹ in underground natural gas storage reservoirs at the end of June 2006 were 2,617 billion cubic feet, 19 percent higher than the level of stocks available 1 year earlier.

Net injections into underground storage during June 2006 were 311 billion cubic feet, 4 percent lower than the amount of net injections during June 2005.

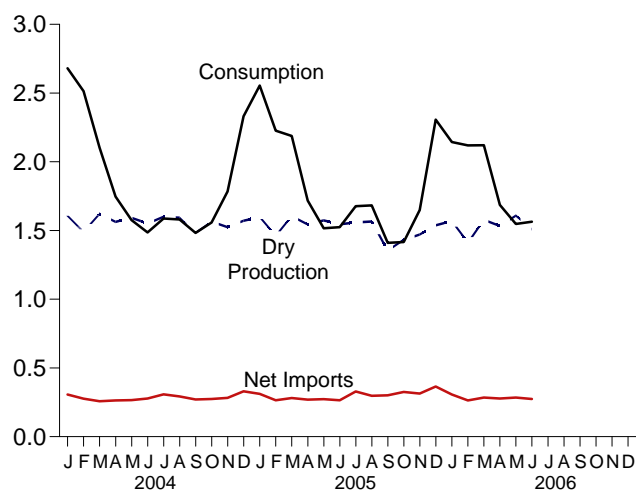
¹Gas available for withdrawal.

Figure 4.1 Natural Gas
(Trillion Cubic Feet)

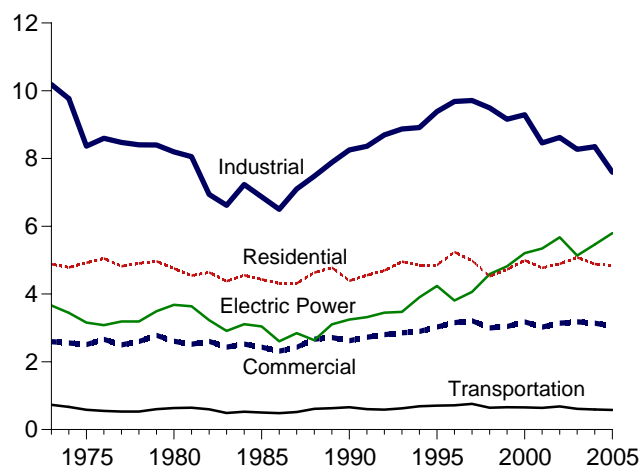
Overview, 1973-2005



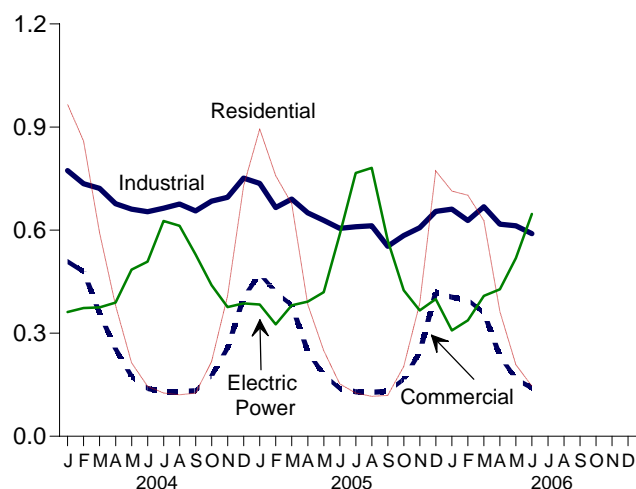
Overview, Monthly



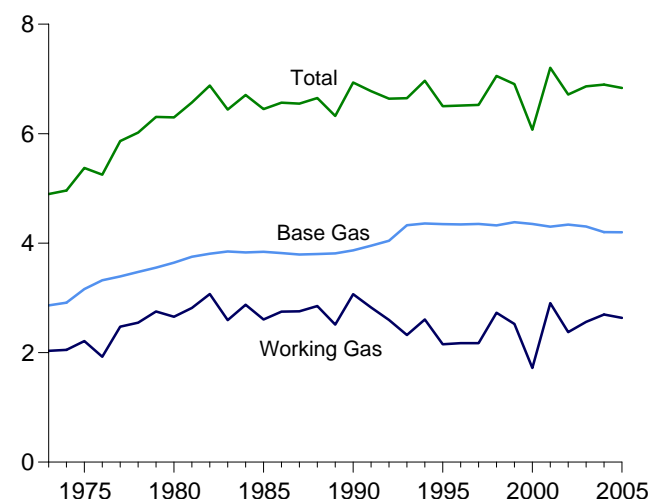
Consumption by Sector, 1973-2005



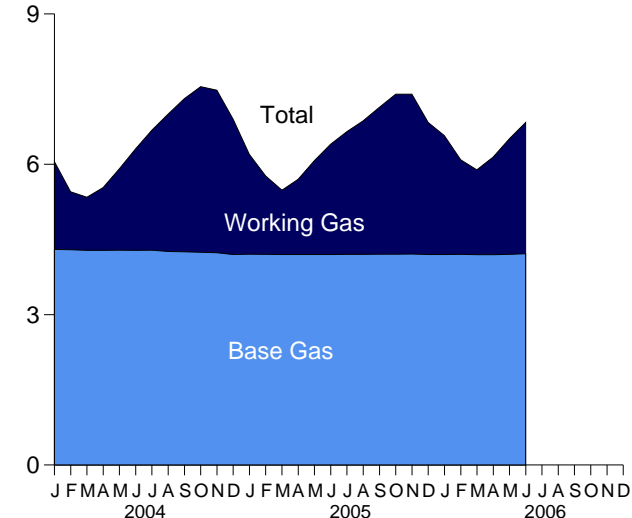
Consumption by Sector, Monthly



Underground Storage, End of Year, 1973-2005



Underground Storage, End of Month



Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/natgas.html>.
Sources: Tables 4.1, 4.4, and 4.5.

Table 4.1 Natural Gas Overview
(Billion Cubic Feet)

	Dry Gas Production ^a	Supplemental Gaseous Fuels ^b	Trade			Net Storage Withdrawals ^c	Balancing Item ^d	Consumption ^e
			Imports	Exports	Net Imports			
1973 Total	^f 21,731	NA	1,033	77	956	-442	-196	22,049
1975 Total	^f 19,236	NA	953	73	880	-344	-235	19,538
1980 Total	19,403	155	985	49	936	23	-640	19,877
1985 Total	16,454	126	950	55	894	235	-428	17,281
1990 Total	17,810	123	1,532	86	1,447	-513	307	^g 19,174
1995 Total	18,599	110	2,841	154	2,687	415	396	22,207
1996 Total	18,854	109	2,937	153	2,784	2	860	22,610
1997 Total	18,902	103	2,994	157	2,837	24	871	22,737
1998 Total	19,024	102	3,152	159	2,993	-530	657	22,246
1999 Total	18,832	98	3,586	163	3,422	172	-119	22,405
2000 Total	19,182	90	3,782	244	3,538	829	-305	23,333
2001 Total	19,616	86	3,977	373	3,604	-1,166	99	22,239
2002 Total	18,928	68	4,015	516	3,499	468	44	23,007
2003 Total	19,099	68	3,944	680	3,264	-197	44	22,277
2004 January	1,607	7	373	67	306	835	-75	2,680
February	1,489	7	346	70	276	617	125	2,514
March	1,621	7	349	91	258	106	110	2,103
April	1,562	6	325	62	263	-208	123	1,747
May	1,592	7	327	61	266	-391	102	1,575
June	1,551	1	342	64	278	-409	65	1,486
July	1,600	3	375	67	308	-373	50	1,587
August	1,593	6	360	67	293	-356	45	1,580
September	1,482	6	345	74	270	-333	57	1,483
October	1,564	7	336	61	274	-253	-33	1,559
November	1,525	7	369	86	282	65	-94	1,785
December	1,571	6	413	83	330	584	-160	2,331
Total	18,757	68	4,259	854	3,404	-114	315	22,430
2005 January	^E 1,599	5	403	91	311	713	^R -73	^R 2,555
February	^E 1,460	6	354	90	264	429	68	2,227
March	^E 1,605	7	378	96	282	284	11	2,188
April	^E 1,544	6	325	56	^R 270	-216	^R 114	^R 1,718
May	^E 1,574	5	332	59	273	-384	48	1,516
June	^E 1,545	6	320	55	265	-323	32	1,525
July	^E 1,559	6	384	55	329	-256	39	1,677
August	^E 1,565	6	350	52	298	-214	28	1,683
September	^E 1,354	5	345	44	301	-272	22	1,411
October	^E 1,432	6	367	41	326	-266	-81	1,417
November	^E 1,470	6	359	45	314	2	-144	1,649
December	^E 1,537	7	410	45	364	552	-154	2,306
Total	^E 18,244	70	^R 4,327	729	3,598	50	-91	^R 21,871
2006 January	^E 1,570	6	362	56	307	264	^R -3	^R 2,144
February	^E 1,411	7	323	59	264	485	^R -48	^R 2,119
March	^E 1,576	^E 7	350	65	285	200	52	2,120
April	^{RE} 1,533	^E 5	^{RE} 331	^E 53	^{RE} 278	-254	^R 125	^R 1,686
May	^E 1,609	^E 4	^{RE} 345	^{RE} 60	^{RE} 285	-368	^R 19	^R 1,548
June	^E 1,509	^E 5	^E 327	^E 52	^E 274	-311	86	1,564
6-Month Total	^E 9,209	^E 34	^E 2,038	^E 346	^E 1,692	16	230	11,181
2005 6-Month Total	^E 9,326	34	2,112	446	1,666	504	200	11,729
2004 6-Month Total	9,423	35	2,062	415	1,647	551	451	12,106

^a Marketed production (wet) minus extraction loss. See Table 4.2.

^b See Note 1, "Supplemental Gaseous Fuels," at end of section.

^c Net withdrawals from underground storage. For 1980-2004, also includes net withdrawals of liquefied natural gas in above-ground tanks. See Note 2, "Storage," at end of section.

^d See Note 3, "Balancing Item," at end of section. Since 1980, excludes transit shipments that cross the U.S.-Canada border (i.e., natural gas delivered to its destination via the other country).

^e See Note 4, "Consumption," at end of section.

^f May include unknown quantities of nonhydrocarbon gases.

^g For 1989-1992, a small amount of consumption at independent power producers may be counted in both "Other Industrial" and "Electric Power Sector" on

Table 4.4. See Note 5, "Consumption, 1989-1992," at end of section.

R=Revised. E=Estimate. NA=Not available.

Notes: • Totals may not equal sum of components due to independent rounding.

• Geographic coverage is the 50 States and the District of Columbia.

Web Page: For annual data not displayed between 1973 and 1995, see <http://www.eia.doe.gov/emeu/mer/natgas.html>.

Sources: • **Dry Gas Production:** Table 4.2. • **Supplemental Gaseous Fuels and Net Storage Withdrawals: 1973-2000**—Energy Information Administration (EIA), *Natural Gas Annual*, annual reports. **2001 forward**—EIA, *Natural Gas Monthly*, August 2006, Table 2. • **Trade:** Table 4.3. • **Consumption:** Table 4.4.

• **Balancing Item:** Calculated as consumption minus dry gas production, supplemental gaseous fuels, net imports, and net storage withdrawals.

Table 4.2 Natural Gas Production
(Billion Cubic Feet)

	Gross Withdrawals ^a	Repressuring ^b	Nonhydrocarbon Gases Removed ^c	Vented ^d and Flared ^e	Marketed Production ^f	Extraction Loss ^g	Dry Gas Production ^h
1973 Total	24,067	1,171	NA	248	ⁱ 22,648	917	ⁱ 21,731
1975 Total	21,104	861	NA	134	ⁱ 20,109	872	ⁱ 19,236
1980 Total	21,870	1,365	199	125	20,180	777	19,403
1985 Total	19,607	1,915	326	95	17,270	816	16,454
1990 Total	21,523	2,489	289	150	18,594	784	17,810
1995 Total	23,744	3,565	388	284	19,506	908	18,599
1996 Total	24,114	3,511	518	272	19,812	958	18,854
1997 Total	24,213	3,492	599	256	19,866	964	18,902
1998 Total	24,108	3,427	617	103	19,961	938	19,024
1999 Total	23,823	3,293	615	110	19,805	973	18,832
2000 Total	24,174	3,380	505	91	20,198	1,016	19,182
2001 Total	24,501	3,371	463	97	20,570	954	19,616
2002 Total	23,941	3,455	502	99	19,885	957	18,928
2003 Total	24,119	3,548	499	98	19,974	876	19,099
2004 January	2,068	326	48	7	1,686	79	1,607
February	1,925	311	45	7	1,563	74	1,489
March	2,086	329	47	8	1,702	80	1,621
April	1,999	305	46	8	1,639	77	1,562
May	2,010	285	48	8	1,670	79	1,592
June	1,968	285	47	8	1,628	77	1,551
July	2,022	287	48	9	1,679	79	1,600
August	2,027	297	50	8	1,672	79	1,593
September	1,909	299	47	8	1,556	73	1,482
October	2,024	325	49	9	1,641	77	1,564
November	1,980	322	49	9	1,600	75	1,525
December	2,038	333	49	8	1,648	78	1,571
Total	24,055	3,702	572	98	19,684	927	18,757
2005 January	^E 2,070	^E 330	^E 54	^E 8	^E 1,678	^E 79	^E 1,599
February	^E 1,890	^E 302	^E 49	^E 7	^E 1,532	^E 72	^E 1,460
March	^E 2,080	^E 333	^E 54	^E 8	^E 1,684	^E 79	^E 1,605
April	^E 1,982	^E 302	^E 51	^E 8	^E 1,621	^E 76	^E 1,544
May	^E 2,024	^E 311	^E 54	^E 8	^E 1,651	^E 78	^E 1,574
June	^E 1,958	^E 277	^E 52	^E 8	^E 1,621	^E 76	^E 1,545
July	^E 1,973	^E 275	^E 54	^E 8	^E 1,636	^E 77	^E 1,559
August	^E 1,992	^E 285	^E 55	^E 8	^E 1,643	^E 77	^E 1,565
September	^E 1,763	^E 283	^E 50	^E 8	^E 1,421	^E 67	^E 1,354
October	^E 1,873	^E 311	^E 52	^E 7	^E 1,503	^E 71	^E 1,432
November	^E 1,928	^E 324	^E 53	^E 8	^E 1,543	^E 73	^E 1,470
December	^E 1,985	^E 311	^E 53	^E 8	^E 1,613	^E 76	^E 1,537
Total	^E 23,518	^E 3,644	^E 632	^E 98	^E 19,145	^E 901	^E 18,244
2006 January	^E 2,022	^E 313	^E 54	^E 8	^E 1,648	^E 78	^E 1,570
February	^E 1,821	^E 284	^E 48	^E 8	^E 1,481	^E 70	^E 1,411
March	^E 2,036	^E 314	^E 59	^E 9	^E 1,654	^E 78	^E 1,576
April	^{RE} 1,979	^{RE} 308	^{RE} 54	^{RE} 9	^{RE} 1,609	^{RE} 76	^{RE} 1,533
May	^E 2,076	^E 322	^E 57	^E 9	^E 1,688	^E 79	^E 1,609
June	^E 1,949	^E 302	^E 54	^E 9	^E 1,584	^E 75	^E 1,509
6-Month Total	^E 11,884	^E 1,843	^E 326	^E 51	^E 9,664	^E 455	^E 9,209
2005 6-Month Total	^E 12,004	^E 1,854	^E 315	^E 49	^E 9,787	^E 461	^E 9,326
2004 6-Month Total	12,055	1,840	281	46	9,888	465	9,423

^a Gas withdrawn from natural gas and crude oil wells; excludes lease condensate.

^b Natural gas injected into natural gas and crude oil formations to effect greater ultimate recovery.

^c See Note 6, "Nonhydrocarbon Gases Removed," at end of section.

^d Natural gas released into the air on the base site or at processing plants.

^e Natural gas burned in flares on the base site or at processing plants. See Note 7, "Production," at end of section.

^f Gross withdrawals minus repressuring, nonhydrocarbon gases removed, and vented and flared. See Note 7, "Production," at end of section.

^g See Note 8, "Extraction Loss," at end of section.

^h Marketed production (wet) minus extraction loss.

ⁱ May include unknown quantities of nonhydrocarbon gases.

R=Revised. NA=Not available. E=Estimate.

Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: For annual data not displayed between 1973 and 1995, see <http://www.eia.doe.gov/emeu/mer/natgas.html>.

Sources: • **1973-2000:** Energy Information Administration (EIA), *Natural Gas Annual 2000*, Table 93. • **2001 forward:** EIA, *Natural Gas Monthly*, August 2006, Table 1.

Table 4.3 Natural Gas Trade by Country
(Billion Cubic Feet)

	Imports								Exports			
	Algeria ^a	Australia ^a	Canada ^b	Mexico ^b	Qatar ^a	Trinidad and Tobago ^a	Other ^c	Total	Canada ^b	Japan ^a	Mexico ^b	Total
1973 Total	3	0	1,028	2	0	0	0	1,033	15	48	14	77
1975 Total	5	0	948	0	0	0	0	953	10	53	9	73
1980 Total	86	0	797	102	0	0	0	985	(s)	45	4	49
1985 Total	24	0	926	0	0	0	0	950	(s)	53	2	55
1990 Total	84	0	1,448	0	0	0	0	1,532	17	53	16	86
1995 Total	18	0	2,816	7	0	0	0	2,841	28	65	61	154
1996 Total	35	0	2,883	14	0	0	5	2,937	52	68	34	153
1997 Total	66	10	2,899	17	0	0	2	2,994	56	62	38	157
1998 Total	69	12	3,052	15	0	0	5	3,152	40	66	53	159
1999 Total	76	12	3,368	55	20	51	5	3,586	39	64	61	163
2000 Total	47	6	3,544	12	46	99	28	3,782	73	66	106	244
2001 Total	65	2	3,729	10	23	98	50	3,977	167	66	141	373
2002 Total	27	0	3,785	2	35	151	16	4,015	189	63	263	516
2003 Total	53	0	3,437	0	14	378	61	3,944	271	66	343	680
2004 January	7	0	320	0	0	43	3	373	31	5	31	67
February	8	0	297	0	0	41	0	346	38	5	27	70
March	11	0	300	0	0	38	0	349	56	6	30	91
April	8	0	279	0	3	35	0	325	33	6	24	62
May	5	3	273	0	3	36	6	327	27	2	32	61
June	16	3	285	0	0	34	4	342	24	4	36	64
July	11	6	300	0	3	38	17	375	23	6	38	67
August	22	0	301	0	0	38	0	360	23	6	39	67
September	7	0	288	0	0	41	9	345	30	7	37	74
October	8	0	288	0	3	36	0	336	22	5	34	61
November	3	0	328	0	0	38	0	369	46	6	35	86
December	14	3	349	0	0	44	3	413	43	6	34	83
Total	120	15	3,607	0	12	462	43	4,259	395	62	397	854
2005 January	6	0	345	0	0	44	8	403	53	6	33	91
February	11	0	300	0	3	39	0	354	53	6	31	90
March	3	0	332	(s)	0	40	3	378	65	6	26	96
April	9	0	277	(s)	0	36	3	325	29	6	21	56
May	11	0	280	(s)	0	41	0	332	28	4	27	59
June	12	0	264	0	0	42	3	320	18	4	33	55
July	6	0	331	(s)	0	41	6	384	18	7	30	55
August	3	0	306	0	0	27	14	350	19	6	27	52
September	6	0	292	1	0	35	11	345	16	6	22	44
October	12	0	306	1	0	33	15	367	15	6	20	41
November	9	0	299	3	0	30	19	359	20	6	19	45
December	9	0	355	4	0	31	11	410	23	6	17	45
Total	97	0	3,686	9	3	439	92	R 4,327	358	65	305	729
2006 January	3	0	321	1	0	30	6	362	32	6	18	56
February	3	0	283	(s)	0	28	8	323	33	6	20	59
March	3	0	316	1	0	30	0	350	37	6	22	65
April	3	0	RE 273	0	0	36	20	RE 331	E 16	6	E 32	E 53
May	0	0	RE 278	0	0	44	23	RE 345	RE 22	6	E 32	RE 60
June	3	0	E 265	0	0	39	20	E 327	E 14	6	E 32	E 52
6-Month Total	14	0	E 1,736	3	0	208	77	E 2,038	E 155	33	E 158	E 346
2005 6-Month Total	53	0	1,798	1	3	242	16	2,112	246	30	170	446
2004 6-Month Total	55	6	1,754	0	6	228	13	2,062	209	27	179	415

^a As liquefied natural gas.

^b By pipeline, except for very small amounts of liquefied natural gas imported from Canada in 1973, 1977, and 1981 and exported to Mexico beginning in 1998. See Note 9, "Imports and Exports," at end of section.

^c Brunei in 2002; Egypt in 2005 forward; Indonesia in 1986 and 2000; Malaysia in 1999 and 2002 forward; Nigeria in 2000 forward; Oman in 2000 forward; and United Arab Emirates in 1996-2000

R=Revised, E=Estimate. (s)=Less than 500 million cubic feet.

Notes: • See Note 9, "Imports and Exports," at end of section. • Totals may

not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: For annual data not displayed between 1973 and 1995, see <http://www.eia.doe.gov/emeu/mer/natgas.html>.

Sources: • **1973-1987:** Energy Information Administration (EIA), Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas."

• **1988-2000:** EIA, *Natural Gas Annual*, annual reports. • **2001 forward:** EIA, *Natural Gas Monthly*, August 2006, Tables 5 and 6; and Department of Energy, Office of Fossil Energy, "Natural Gas Imports and Exports."

Table 4.4 Natural Gas Consumption by Sector
(Billion Cubic Feet)

	End-Use Sectors										Electric Power Sector ^{f,g}	Total
	Residential	Commercial ^a	Lease and Plant Fuel	Industrial			Total	Transportation				
				Other Industrial				Pipelines ^d and Distribution ^e	Vehicle Fuel	Total		
				CHP ^b	Non-CHP ^c	Total						
1973 Total	4,879	2,597	1,496	(^h)	8,689	8,689	10,185	728	NA	728	3,660	22,049
1975 Total	4,924	2,508	1,396	(^h)	6,968	6,968	8,365	583	NA	583	3,158	19,538
1980 Total	4,752	2,611	1,026	(^h)	7,172	7,172	8,198	635	NA	635	3,682	19,877
1985 Total	4,433	2,432	966	(^h)	5,901	5,901	6,867	504	NA	504	3,044	17,281
1990 Total	4,391	2,623	1,236	1,055	5,963	7,018	8,255	660	(s)	660	3,245	19,174
1995 Total	4,850	3,031	1,220	1,258	6,906	8,164	9,384	700	5	705	4,237	22,207
1996 Total	5,241	3,158	1,250	1,289	7,146	8,435	9,685	711	6	718	3,807	22,610
1997 Total	4,984	3,215	1,203	1,282	7,229	8,511	9,714	751	8	760	4,065	22,737
1998 Total	4,520	2,999	1,173	1,355	6,965	8,320	9,493	635	9	645	4,588	22,246
1999 Total	4,726	3,045	1,079	1,401	6,678	8,079	9,158	645	12	657	4,820	22,405
2000 Total	4,996	3,182	1,151	1,386	6,757	8,142	9,293	642	13	655	5,206	23,333
2001 Total	4,771	3,023	1,119	1,310	6,035	7,344	8,463	625	15	640	5,342	22,239
2002 Total	4,889	3,144	1,113	1,240	6,267	7,507	8,620	667	15	682	5,672	23,007
2003 Total	5,079	3,179	1,122	1,144	6,007	7,150	8,273	591	18	610	5,135	22,277
2004 January	966	509	94	101	578	679	773	69	2	71	361	2,680
February	860	479	87	98	550	648	735	65	2	67	373	2,514
March	592	358	95	96	530	626	721	54	2	56	375	2,103
April	380	254	91	93	492	586	677	44	2	46	389	1,747
May	214	174	93	101	467	568	661	40	2	41	485	1,575
June	146	139	91	99	464	563	653	37	2	39	508	1,486
July	126	129	94	108	462	570	664	40	2	42	626	1,587
August	121	129	93	105	478	583	676	40	2	42	612	1,580
September	126	133	87	98	471	569	656	37	2	39	529	1,483
October	217	176	92	95	498	593	684	39	2	41	440	1,559
November	409	257	89	93	513	606	695	45	2	47	376	1,785
December	728	403	92	102	558	660	751	60	2	62	387	2,331
Total	4,885	3,142	1,098	1,191	6,060	7,251	8,349	572	21	592	5,463	22,430
2005 January	894	474	E 94	84	R 558	R 642	R 736	65	2	67	384	R 2,555
February	759	418	E 85	76	505	580	666	57	2	58	326	2,227
March	677	383	E 94	82	514	596	690	56	2	58	381	2,188
April	384	R 246	E 90	79	481	560	650	44	2	46	392	R 1,718
May	249	178	E 92	78	458	537	629	39	2	41	419	1,516
June	152	140	E 90	85	430	515	605	39	2	41	587	1,525
July	126	130	E 91	91	428	519	610	43	2	45	766	1,677
August	116	R 128	E 92	90	431	521	613	43	2	45	781	1,683
September	119	131	E 79	73	401	474	553	36	2	38	570	1,411
October	203	166	E 84	63	437	500	584	36	2	38	425	1,417
November	387	245	E 86	65	456	521	607	42	2	44	366	1,649
December	772	420	E 90	73	492	564	654	59	2	61	399	2,306
Total	4,838	3,059	E 1,068	938	R 5,591	R 6,529	R 7,597	558	22	580	5,797	R 21,871
2006 January	714	405	E 92	71	R 498	R 569	R 661	55	2	57	308	R 2,144
February	702	R 397	E 83	67	478	545	628	54	2	56	337	R 2,119
March	628	360	E 92	74	501	575	668	54	2	56	409	2,120
April	R 363	233	RE 90	82	446	528	R 617	43	2	45	428	R 1,686
May	208	R 167	E 94	94	425	518	613	R 39	2	R 42	519	R 1,548
June	146	141	E 88	104	397	501	590	38	2	40	647	1,564
6-Month Total	2,760	1,702	E 539	491	2,746	3,237	3,776	284	12	296	2,648	11,181
2005 6-Month Total	3,115	1,839	E 546	483	2,947	3,430	3,976	299	11	310	2,489	11,729
2004 6-Month Total	3,158	1,914	552	589	3,080	3,670	4,221	310	10	320	2,492	12,106

^a All commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Table 7.4c for CHP fuel use.

^b Industrial combined-heat-and-power (CHP) and a small number of industrial electricity-only plants.

^c All industrial sector fuel use other than that in "Lease and Plant Fuel" and "CHP."

^d Natural gas consumed in the operation of pipelines, primarily in compressors.

^e Natural gas used as fuel in the delivery of natural gas to consumers.

^f The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

^g Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

^h Included in "Non-CHP."

ⁱ For 1989-1992, a small amount of consumption at independent power producers may be counted in both "Other Industrial" and "Electric Power Sector." See Note 5, "Consumption, 1989-1992," at end of section.

R=Revised. E=Estimate. NA=Not available. (s)=Less than 500 million cubic feet.

Notes: • Data are for natural gas, plus a small amount of supplemental

gaseous fuels that cannot be identified separately. • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: For annual data not displayed between 1973 and 1995, see <http://www.eia.doe.gov/emeu/mer/natgas.html>.

Sources: • **Residential, Commercial, Lease and Plant Fuel, Other Industrial Total and Pipelines and Distribution: 1973-2000**—Energy Information Administration (EIA), *Natural Gas Annual (NGA)*, annual reports. **2001 forward**—EIA, *Natural Gas Monthly (NGM)*, August 2006, Table 3.

• **Industrial CHP:** Table 7.4c. • **Vehicle Fuel: 1990 and 1991**—EIA, *NGA 2000*, (November 2001), Table 95. **1992-1998**—"Alternatives to Traditional Transportation Fuels 1999" (October 1999), Table 10, and "Alternatives to Traditional Transportation Fuels 2003" (February 2004), Table 10. Data for compressed natural gas and liquefied natural gas in gasoline-equivalent gallons were converted to cubic feet by multiplying by the motor gasoline conversion factor (see Table A3) and dividing by the natural gas end-use sectors conversion factor (see Table A4). **1999 and 2000**—EIA, *NGA*, annual reports. **2001 forward**—EIA, *NGM*, August 2006, Table 3. • **Electric Power Sector: 1973-1988**—Table 7.3b. **1989 forward**—Table 7.4b. • **All Other Data:** Calculated.

Table 4.5 Natural Gas in Underground Storage

(Volumes in Billion Cubic Feet)

	Natural Gas in Underground Storage, End of Period			Change in Working Gas From Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total ^a	Volume	Percent	Withdrawals	Injections	Net ^{b,c}
1973 Total	2,864	2,034	4,898	305	17.6	1,533	1,974	-442
1975 Total	3,162	2,212	5,374	162	7.9	1,760	2,104	-344
1980 Total	3,642	2,655	6,297	-99	-3.6	1,910	1,896	14
1985 Total	3,842	2,607	6,448	-270	-9.4	2,359	2,128	231
1990 Total	3,868	3,068	6,936	555	22.1	1,934	2,433	-499
1995 Total	4,349	2,153	6,503	-453	-17.4	2,974	2,566	408
1996 Total	4,341	2,173	6,513	19	.9	2,911	2,906	6
1997 Total	4,350	2,175	6,525	2	.1	2,824	2,800	24
1998 Total	4,326	2,730	7,056	554	25.5	2,379	2,905	-526
1999 Total	4,383	2,523	6,906	-207	-7.6	2,772	2,598	174
2000 Total	4,352	1,719	6,071	-806	-31.9	3,498	2,684	814
2001 Total	4,301	2,904	7,204	1,185	68.9	2,309	3,464	-1,156
2002 Total	4,340	2,375	6,715	-528	-18.2	3,138	2,670	468
2003 Total	4,303	2,563	6,866	187	7.9	3,099	3,292	-193
2004 January	4,301	1,751	6,052	217	14.1	875	60	815
February	4,297	1,156	5,452	292	33.8	650	48	603
March	4,283	1,058	5,342	328	45.0	272	168	104
April	4,283	1,252	5,535	357	39.8	95	299	-203
May	4,287	1,624	5,911	323	24.9	43	425	-382
June	4,284	2,023	6,307	255	14.4	36	436	-400
July	4,287	2,395	6,681	266	12.5	60	424	-364
August	4,262	2,743	7,005	307	12.6	57	405	-348
September	4,254	3,057	7,310	214	7.5	67	393	-325
October	4,246	3,302	7,548	172	5.5	63	310	-247
November	4,235	3,245	7,479	207	6.8	192	128	64
December	4,201	2,696	6,897	133	5.2	626	55	571
Total	4,201	2,696	6,897	133	5.2	3,037	3,150	-113
2005 January	4,205	1,994	6,199	243	13.9	772	59	713
February	4,204	1,564	5,769	409	35.4	488	59	429
March	4,200	1,284	5,484	226	21.3	385	101	284
April	4,200	1,499	5,699	246	19.7	72	288	-216
May	4,200	1,875	6,076	251	15.5	56	439	-384
June	4,201	2,197	6,399	175	8.6	67	390	-323
July	4,203	2,450	6,653	56	2.3	95	351	-256
August	4,203	2,662	6,865	-80	-2.9	97	311	-214
September	4,205	2,932	7,136	-125	-4.1	86	358	-272
October	4,206	3,194	7,400	-108	-3.3	74	340	-266
November	4,209	3,189	7,398	-55	-1.7	206	203	2
December	4,200	2,635	6,835	-61	-2.3	651	99	552
Total	4,200	2,635	6,835	-61	-2.3	3,048	2,998	50
2006 January	4,201	2,371	6,572	377	18.9	374	110	264
February	4,204	1,886	6,090	322	20.6	539	54	485
March	4,197	1,692	5,889	407	31.7	331	131	200
April	4,198	1,945	6,143	447	29.8	77	331	-254
May	4,202	2,310	6,512	435	23.2	52	420	-368
June	4,216	2,617	6,833	419	19.1	62	373	-311
6-Month Total	-	-	-	-	-	1,435	1,419	16
2005 6-Month Total	-	-	-	-	-	1,839	1,335	504
2004 6-Month Total	-	-	-	-	-	1,972	1,435	537

^a For total underground storage capacity at the end of each calendar year, see Note 2, "Storage," at end of section.

^b For 1980-2004, data differ from those shown on Table 4.1, which include liquefied natural gas storage for that period.

^c Positive numbers indicate that withdrawals are greater than injections. Negative numbers indicate that injections are greater than withdrawals. Net withdrawals or injections may not equal the difference between applicable ending stocks. See Note 2, "Storage," at end of section.

- =Not applicable.

Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: For annual data not displayed between 1973 and 1995, see <http://www.eia.doe.gov/emeu/mer/natgas.html>.

Sources: • **Storage Activity: 1973-1975**—Energy Information Administration (EIA), *Natural Gas Annual 1994, Volume 2*, Table 9.

1976-1979—EIA, *Natural Gas Production and Consumption 1979*, Table 1. **1980-1995**—EIA, *Historical Natural Gas Annual 1930 Through 2000*, Table 11. **1996-2000**—EIA, *Natural Gas Monthly (NGM)*, monthly issues. • **2001 forward**—EIA, *NGM*, August 2006, Table 9. • **Other Data: 1973 and 1974**—American Gas Association (AGA), *Gas Facts, 1972 Data*, Table 57, *Gas Facts, 1973 Data*, Table 57, and *Gas Facts, 1974 Data*, Table 40. **1975 and 1976**—Federal Energy Administration (FEA), Form FEA-G318-M-0, "Underground Gas Storage Report," and Federal Power Commission (FPC), Form FPC-8, "Underground Gas Storage Report." **1977 and 1978**—EIA, Form FEA-G318-M-0, "Underground Gas Storage Report," and Federal Energy Regulatory Commission (FERC), Form FERC-8, "Underground Gas Storage Report." **1979-1995**—EIA, Form EIA-191, "Underground Gas Storage Report," and FERC, Form FERC-8, "Underground Gas Storage Report." **1996-2003**—EIA, *NGM*, monthly issues. **2004 forward**—EIA, *NGM*, August 2006, Table 9.

Natural Gas

Note 1. Supplemental Gaseous Fuels: Any gaseous substance that, introduced into or commingled with natural gas, increases the volume available for disposition. Such substances include, but are not limited to, propane-air, refinery gas, coke oven gas, still gas, manufactured gas, biomass gas, or air or inert gases added for Btu stabilization.

Annual data beginning with 1980 are from the Energy Information Administration (EIA) *Natural Gas Annual (NGA)*. Unknown quantities of supplemental gaseous fuels are included in consumption data for 1979 and earlier years.

Monthly data are considered preliminary until after the publication of the EIA *NGA*. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. The ratio is applied to the monthly sum of the three elements to compute a monthly supplemental gaseous fuels figure.

Note 2. Storage: Natural gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals from the quantity in storage at the end of the previous period. The difference is due to changes in the quantity of native gas included in the base gas and/or losses in base gas due to migration from storage reservoirs.

Total underground storage capacity at the end of each calendar year since 1975 (first year data were available), in billion cubic feet, was:

1975 ... 6,280	1985 .. 8,087	1995 ... 7,953
1976 ... 6,544	1986 .. 8,145	1996 ... 7,980
1977 ... 6,678	1987 .. 8,124	1997 ... 8,332
1978 ... 6,890	1988 .. 8,124	1998 ... 8,179
1979 ... 6,929	1989 .. 8,120	1999 ... 8,229
1980 ... 7,434	1990 .. 7,794	2000 ... 8,241
1981 ... 7,805	1991 .. 7,993	2001 ... 8,415
1982 ... 7,915	1992 .. 7,932	2002 ... 8,207
1983 ... 7,985	1993 .. 7,989	2003 ... 8,206
1984 ... 8,043	1994 .. 8,043	2004 ... 8,255

Monthly underground storage data are collected from the Federal Energy Regulatory Commission (FERC) Form FERC-8 (interstate data) and EIA Form EIA-191 (intrastate data). Beginning in January 1991, all data are collected on the revised Form EIA-191. Injection and withdrawal data from the FERC-8/EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the EIA *NGA*.

The final monthly and annual storage and withdrawal data for 1980–2004 include both underground and liquefied natural gas (LNG) storage. Annual data on LNG additions and withdrawals are from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying the ratio to the annual LNG data.

Note 3. Balancing Item: The balancing item for natural gas represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas disposition. The differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data reporting systems which vary in scope, format, definitions, and type of respondents.

The increase of 0.2 trillion cubic feet (Tcf) in the “Balancing Item” category in 1983, followed by a decline of 0.5 Tcf in 1984, reflected unusually large differences resulting from the use of the annual billing cycle (essentially December 15 through the following December 14) consumption data in conjunction with calendar year supply data. Record cold temperatures during the last half of December 1983 resulted in a reported 0.3 Tcf increase in net withdrawals from underground storage for peak shaving as compared with the same period in 1982, but the effect of this cold weather was reflected primarily in 1984 consumption data. For underground storage data, see Table F2 in the May 1985 EIA *Natural Gas Monthly (NGM)*, which was published in July 1985.

Note 4. Consumption: Consumption includes use for lease and plant fuel, pipelines and distribution, vehicle fuel, and electric power plants, as well as deliveries to residential, commercial, and other industrial customers.

Final data for series other than “Other Industrial CHP” and “Electric Power Sector” are from the EIA *NGA*. Monthly data are considered preliminary until after publication of the EIA *NGA*. For more detailed information on the methods of estimating preliminary and final monthly data, see the EIA *NGM*.

Note 5. Consumption, 1989-1992: Prior to 1993, deliveries to nonutility generators were not separately collected from natural gas companies on Form EIA-176, “Annual Report of Natural and Supplemental Gas Supply and Disposition.” As a result, for 1989 through 1992, those volumes are probably included in both the industrial and electric power sectors and double-counted in total consumption. In 1993, 0.28 trillion cubic feet was reported as delivered to nonutility generators.

Note 6. Nonhydrocarbon Gases Removed: Annual data on nonhydrocarbon gases removed from marketed production—carbon dioxide, helium, hydrogen sulfide, and nitrogen—are from the EIA *NGA*. Data are not available prior to 1980. Monthly data are reported by three States and computed for six States. Monthly data are preliminary until after publication of the EIA *NGA*. Differences between annual data published in the EIA *NGA* and the sum of the

preliminary monthly data (January–December) are allocated proportionally to the months to create final monthly data.

For further information on methods of estimating preliminary monthly data, see the EIA *NGM*.

Note 7. Production.

Annual data—Final annual data are from the EIA *NGA*.

Estimated monthly data—Data for the two most recent months presented are estimated. Some of the data for earlier months are also estimated or computed. For a discussion of computation and estimation procedures, see the EIA *NGM*.

Preliminary monthly data—Monthly data are considered preliminary until after publication of the EIA *NGA*. Preliminary monthly data are gathered from reports to the Interstate Oil Compact Commission and the U.S. Minerals Management Service. Volumetric data are converted, as necessary, to a standard 14.73 psi pressure base. Unless there are major changes, data are not revised until after publication of the EIA *NGA*.

Final monthly data—Differences between annual data in the EIA *NGA* and the sum of preliminary monthly data (January–December) are allocated proportionally to the months to create final monthly data.

Note 8. Extraction Loss: Extraction loss is the reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

Annual data are from the EIA *NGA*, where they are estimated on the basis of the type and quantity of liquid products extracted from the gas stream and the calculated volume of such products at standard conditions. For a

detailed explanation of the calculations used to derive estimated extraction losses, see the EIA *NGA*.

Preliminary monthly data are estimated on the basis of extraction loss as an annual percentage of marketed production. This percentage is applied to each month's marketed production to estimate monthly extraction loss.

Monthly data are revised and considered final after the publication of the EIA *NGA*. Final monthly data are estimated by allocating annual extraction loss data to the months on the basis of total natural gas marketed production data from the EIA *NGA*.

Note 9. Imports and Exports: The United States imports natural gas via pipeline from Canada and Mexico and imports LNG via tanker from Algeria, Australia, Brunei, Indonesia, Malaysia, Nigeria, Oman, Qatar, Trinidad and Tobago, and the United Arab Emirates. In addition, very small amounts of LNG arrived from Canada in 1973 (667 million cubic feet), 1977 (572 million cubic feet), and 1981 (6 million cubic feet). The United States exports natural gas via pipeline to Canada and Mexico and exports LNG via tanker to Japan. Also, small amounts of LNG have gone to Mexico since 1998.

Annual and final monthly data are from the annual EIA Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas," which requires data to be reported by month for the calendar year.

Preliminary monthly data are EIA estimates. For a discussion of estimation procedures, see the EIA *NGM*. Preliminary data are revised after the publication of the EIA *U.S. Imports and Exports of Natural Gas*.